



Report from Physics Coordinators

Keisuke Fujii
on behalf of the Physics WG
April 22, 2020

***ILD Physics WG
Activities***

Benchmark Analyses

- *Extra Higgs: new version being prepared*
tt/bb: new draft prepared for next iteration
H→ invisible: done!
H→ bb/cc/gg: Frank's comments addressed, waiting for his answer
Others: done
- *Keep communicating with reviewers and finalize analysis notes if you haven't. Don't forget to update GitHub and Confluence pages:*

<https://confluence.desy.de/pages/viewpage.action?pageId=89671192>

Today (March 25)

- *Validation of 250 GeV test samples:*
Uli on dE/dx, Daniel on photon calibration,
Yasser on track refitting, Remi on muon

Benchmark Analyses

- *Extra Higgs: comments being implemented*
tt/bb: new draft in ILD circulation until April 29
- H→bb/cc/gg: comments on the new draft (v.8) have been received.*
Others: done
- *Keep communicating with reviewers and finalize analysis notes if you haven't. Don't forget to update GitHub and Confluence pages:*

<https://confluence.desy.de/pages/viewpage.action?pageId=89671192>

Today (March 25)

- *Takahiro on JES calibration*
- *Validation of 250 GeV test samples: Uli on dE/dx and Keita on 2f-leptonic sample*

Conferences

ICHEP 2020 (physics)

From ILD

- Heavy quark production in high energy electron positron collisions
- Improving Electroweak Precision Observables Including m_w , Γ_w , A_{LR} and TGCs with the ILD Detector
- ILC as a SUSY discovery and precision instrument

From LCC Physics WG

- Expectations for Precision Tests of the Standard Model at the ILC
- Polarized Beams at Future e+e- Colliders
- Precision Higgs physics at the ILC, and its impact on detector design

All accepted as oral presentations!

Rumor says it is going to be virtual at original dates.

Papers

Update on ILD Papers

- ***Higgsinos : accepted for publication in PRD! Proofs checked and comments fed back to the publisher.***
- ***$H \rightarrow \mu^+\mu^-$: Shin-ichi : 2nd draft submitted to ILD referees (Filip & Ivanka), comments coming.***
- ***WIMPs : Moritz : accepted for publication in PRD! Proofs received and checked, fed back to the publisher.***
- ...

Proposed S&A meeting schedule

Apr. 22: Frank

US mini virtual workshop on future e+e- colliders

May 6: Jenny (so called Golden Week in Japan)

May. 20: Daniel (holiday-heavy week in Europe)

Jun. 3: KF

...

Biweekly S&A meeting on Wednesday at 14:00 CERN time.

Physics conveners' meeting every two weeks on Wednesday at 14:00 CERN time interleaved with S&A meetings.

Conveners' ML:

ild-physics-conveners@desy.de

Use this mailing list to send your talk request.

Stay healthy!